Properties of Addition

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Math Objective: Operations and Algebraic Thinking

NCSCOS: Solve problems involving the four operations, and identify and explain patterns in arithmetic.

ADDENDS

Addends are numbers being added together.

4+3=

SUM

Sum is the answer you get when adding the numbers together.

4+3= 7

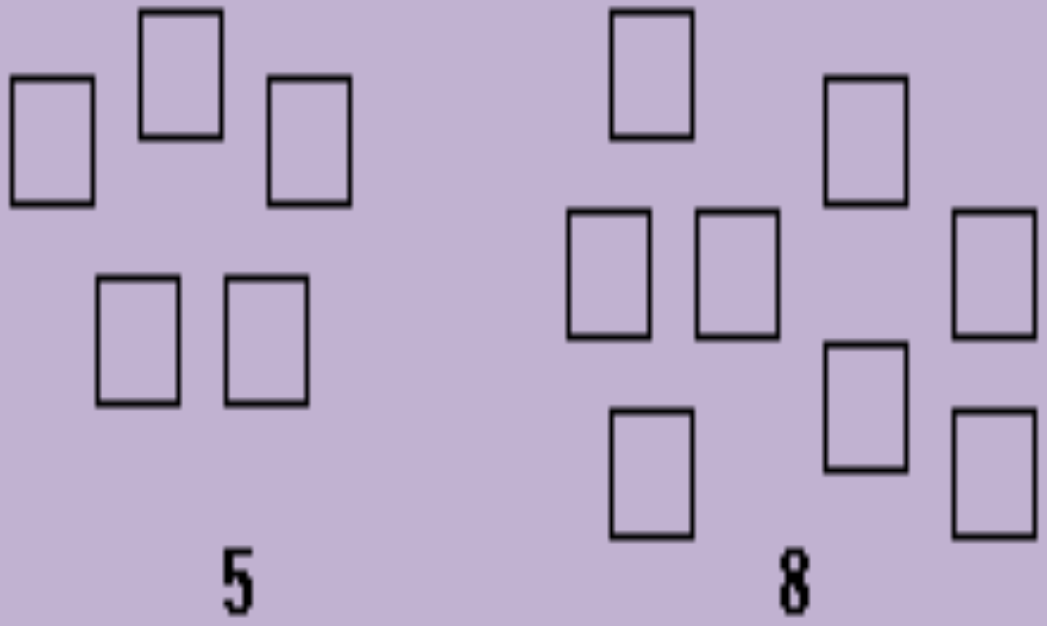
COMMUTATIVE (ORDER) PROPERTY OF ADDITION

When you add numbers in any order and the sum will be the same.

$$7+5=5+7$$

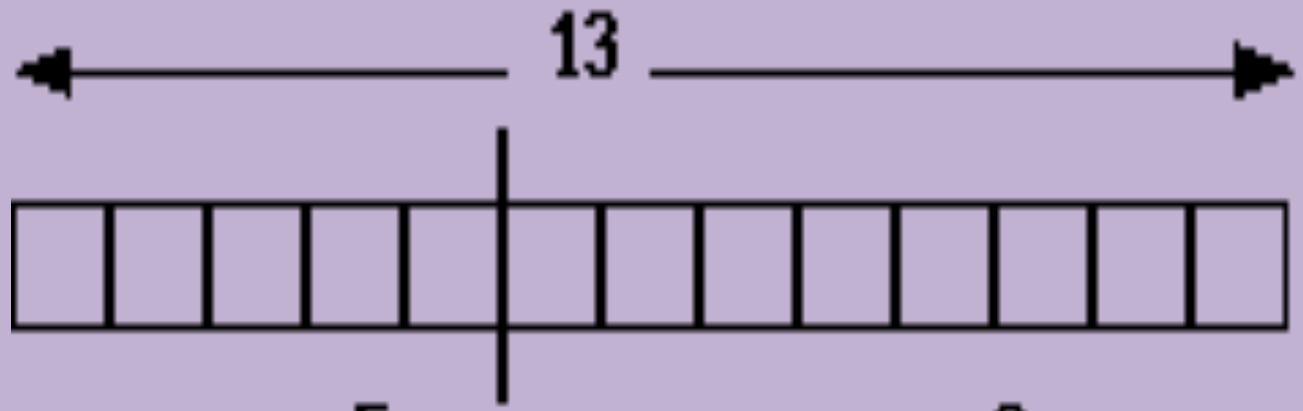
The commutative property means that order doesn"t matter when we add two numbers.

It's easy to see with a model:



Website: http://www.europa.com/~paulg/mathmodels/commutative.html

Let's turn the model around the other way and see what happens:



$5 + 8 = 13$

Now let's look in your textbook on page 32 and see another way to show commutative property of addition.

Parentheses

- When you have parentheses in a problem you are to add them first.

$$(6+2)+3 = 8+7$$

ASSOCIATIVE PROPERTY OF ADDITION

Group addends (numbers begin added together) in any way and the sum will be the same.

$(2 + 5) + 4 = 11$ or $2 + (5 + 4) = 11$

$(9 + 3) + 4 = 16$ or $9 + (3 + 4) = 16$

Just remember that when the grouping of addends changes, the sum remains the same.

IDENTITY PROPERTY OF ADDITION

The sum of zero and any number is that same number.

$$5+0=5$$

Review

Let's match the property to the correct example.

Commutative Order	10 +0= 10
Identity	(3+3) +8= 3 +(3+8)
Associative	6+5=5+6